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James B. Allison

ACTION OF THIONYL CHLORIDE ON DIACETONE-GLUCOSE

JAMES B. ALLISON

Diacetone-glucose was treated with thionyl chloride in hopes of replacing the free hydroxy group by chlorine. The sodium salt of diacetone-glucose (and other diacetonehexoses) in inert solvents, reacts instantaneously with thionyl chloride. The reaction product is apparently the di-(diacetone-glucose)-ester of sulfurous or sulfonic acid. One fraction has been obtained crystalline but no analysis was attempted due to the small yields. The product reacts with hydrazine to form the 3-hydrazino-diacetone-glucose which would indicate a structure analogous to that of the 3-toluol-sulfono-diacetone-glucose.

OBSERVATIONS ON THE NUTRITIVE VALUE OF SKIMMED MILK POWDER

L. T. ANDEREGG

Diets containing skim milk powder as the source of protein and vitamins other than A, produce results different from comparable diets made up from whole milk powder. Growth is about normal or may be better than normal. Reproduction and rearing of young is not normal. There are few or no litters, and the young almost invariably die. The period of producing the first litters may be much delayed. Addition of yeast or wheat embryo has resulted in normal growth and in the normal rearing of the first litters of young. The second generation rats are growing normally and appear to be in fine condition due to these supplements.

THE PREPARATION OF ZEOLYTIC WATER SOFTENING MATERIALS

ESTON L. BARTHEL

Raw untreated green sand is very colloidal and has little or no water softening power. By heating the green sand to 400°C and subsequently treating it with a salt (NaCl) solution, a stable zeolitic sand is obtained which has good water softening power.